System-of-Care Evaluation Brief

Effects of Stress and Trauma on Children and Adolescents

The Comprehensive Community Mental Health Services for Children and Their Families Program funds local communities to develop systems of care for children and adolescents with serious emotional disturbance. The national evaluation of this program affords the opportunity to gather information on the effects of stress and trauma on children and adolescents referred for mental health services in systems of care.

Trauma can occur when an individual experiences, witnesses, or is confronted by an event or events that involve actual or threatened death or serious injury, or poses a threat to the physical integrity of others. Often, an individual reacts to the trauma with emotional responses including intense fear, helplessness, or horror.

It is now recognized that children and youth may exhibit Post-Traumatic Stress Disorder (PTSD). There is a range of traumatic stressors for children and adolescents. These include events such as natural or human disasters, exposure to war and violence, chronic/life-threatening illness, exposure to community violence, exposure or experience of interpersonal violence, and sexual or physical abuse.

Research has demonstrated a link between child and family risk factors and serious emotional disturbance. Child risk factors such as exposure to violence, sexual abuse, physical abuse and neglect, and substance abuse have been linked to emotional and psychological distress (McLoyd, 1991). Furthermore, family risk factors such as a history of mental illness, family violence, and felony convictions have also been associated with child and adolescent emotional disturbance (Friedman, Kutash, & Duchnowski, 1996).

Children and youth involved in systems of care experience many of these child and family risk factors. Among children participating in the national evaluation, the most frequently reported child risk factor was physical abuse (32%, *n* = 10,236), with sexual abuse reported for 23% (*n* = 9,826). These children also had histories of psychiatric hospitalization (25%, *n* = 11,121), substance abuse (21%, *n* = 10,699), running away (24%, *n* = 11,018), and attempted suicide (14%, *n* = 10,749). Sixty-two percent of caregivers reported a history of substance abuse in the biological family (*n* = 10,470). More than half of the caregivers (54%, *n* = 10,359) reported a history of family violence, and 45% reported mental illness in the biological

System-of-Care Evaluation Briefs report findings from the National Evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program funded by the Center for Mental Health Services of the Substance Abuse and Mental Health Services Administration. The Program provides six-year grants to states, political subdivisions of states, American Indian Tribes, tribal organizations, and territories to support the development of community-based systems of care for children with serious emotional disturbance and their families. Systems of care are developed using an approach that emphasizes integration of services through collaborative arrangements between child-serving sectors such as education, child welfare, juvenile justice, and mental health; youth and family caregiver participation; and cultural and linguistic competence of services. The Briefs are published monthly and are sponsored by the Child, Adolescent and Family Branch of the federal Center for Mental Health Services.

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family (*n* = 9,922). Twenty-one percent of children had family members who had been convicted of a crime (*n* = 9,965) and 18% had at least one parent who had a history of psychiatric hospitalization (*n* = 9,947).

Symptom Clusters

Symptoms of PTSD are associated with three distinct symptom clusters. These include reexperiencing the traumatic event, avoidance of trauma-relevant symptoms, and hyperarousal. Many suffering from PTSD experience recurrent intrusive thoughts and recollections of the traumatic event. In young children, this aspect may be expressed through repetitive play of themes or elements of the traumatic event. Young children may experience disturbing or frightening dreams. In rare cases, people may experience a dissociative state lasting a few seconds or longer, often referred to as "flashbacks." These episodes are characterized by intense physical and psychological arousal and often are triggered by environmental cues that resemble or symbolize some aspect of the traumatic event.

In addition, children and youth with PTSD may avoid activities, places, or people who remind them of the event. They also may avoid thoughts, emotions, and conversations associated with the trauma. Symptoms also may include the feeling of being "detached" from others. They may have less interest in activities that were, prior to the event, significant activities.

The final symptom cluster is persistent symptoms of increased arousal. These symptoms may include difficulty falling or staying asleep, irritability and outbursts of anger, difficulty concentrating, hypervigilance, and an exaggerated startle response.

Several demographic and environmental risk factors increase the likelihood of developing the disorder. Young children and females are particularly at risk. The severity of the traumatic event and both emotional and physical proximity to the event are important risk factors. Prolonged exposure to the traumatic event also increases the likelihood of developing symptoms.

National Evaluation Data and PTSD

A subset of youth (*n* = 2,616) with complete information on demographics, diagnosis, child and family risk factors, functional impairment as measured by the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1990), and child internalizing problems as measured by the Child Behavior Checklist (CBCL; Achenbach, 1991) was examined. Among these youth, 7% entered system-of-care services with a diagnosis of PTSD. Girls (9.9%) were more likely than boys (6.1%) to have this diagnosis. White youth (8.2%) were more likely than Native Americans (6.4%) or African-Americans (4.0%) to have a PTSD diagnosis. Children with this diagnosis did not differ in age or poverty status.

Children and youth with a PTSD diagnosis were more likely than those without this diagnosis to have a history of psychiatric hospitalization or residential treatment (42% versus 28%). In addition, children and youth diagnosed with PTSD were more likely than their peers to have attempted suicide (20% vs. 13%). Children with a PTSD diagnosis were more likely to have family histories of domestic violence, substance abuse, or family member psychiatric hospitalization, and were more likely to have run away from home.

Differences in Youth Outcomes by Presence of PTSD

Children with PTSD diagnoses and those without this diagnosis differed in their functional impairment as measured by the CAFAS (see Figure 1). Children and youth with a diagnosis of PTSD were more likely than their counterparts without this diagnosis to have higher CAFAS scores on the Mood, Self-Harm, and Thinking subscales.

Differences between the two groups were also found on several of the CBCL domains, including withdrawn, anxious, thought problems, and internalizing behavior problems (see Figure 2). Across all of these domains, caregivers of children and youth with a PTSD diagnosis were more likely to report higher scores than caregivers of children and youth without a PTSD diagnosis.

Figure 1

Differences on the CAFAS at Services Entry by Presence of PTSD

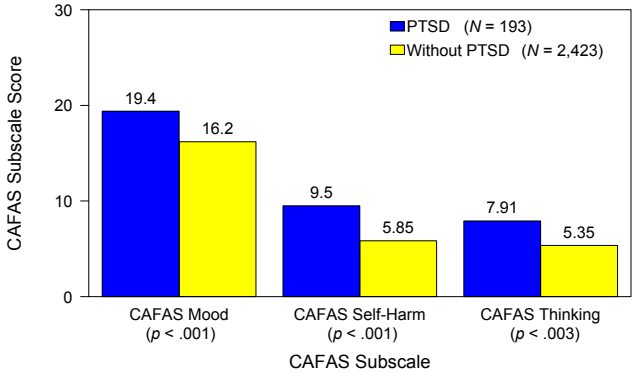
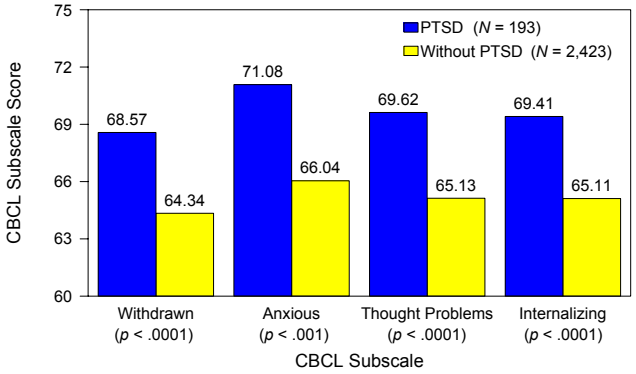


Figure 2

Differences on the CBCL at Services Entry by Presence of PTSD



Discussion

The results of this study suggest that children and youth in the national evaluation sample who have a diagnosis of PTSD have experienced more child and family risk factors, are more impaired, and suffer more psychological distress than children and youth without PTSD. It is not surprising that those with PTSD suffer greater functional impairment and psychological distress. It is telling, however, that much of the distress is expressed in ways that are more "internalizing." Those with PTSD were more likely to have higher impairment in the areas of mood and self-harm, more withdrawal behavior, more anxiety, greater thought disturbance, and, overall, more internalizing problems. Given that one-fourth of those with PTSD had a history of suicide attempts, this pattern of outcomes is cause for concern.

These results have important implications for systems of care and for the larger community. Improved identification is needed at both the screening level and at the level of diagnosis. Crisis intervention and acute care that provide immediate support and safety are critical. After the initial crisis, individual, family, and group therapy can help both the child and the family deal with persistent symptoms. Medication may be necessary for children at high risk for suicide attempts. Community- and school-based approaches may be appropriate when the trauma is felt by the larger community. Community-based prevention such as disaster preparedness efforts underscore the importance of prevention efforts, and community awareness campaigns highlight awareness of the problem of PTSD among children and youth.

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Children and youth who have a diagnosis of Post Traumatic Stress Disorder have experienced more child and family risk factors, are more impaired, and suffer more from psychological distress than children and youth without PTSD.

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